

### ABSTRACT

According to one exemplary embodiment, an overmolded module comprises a surface mount component situated over a substrate, where the surface mount component comprises a first terminal and a second terminal. The overmolded module can be an

5 MCM and the substrate can be a laminate circuit board, for example. The overmolded module further comprises a first and a second pad situated on the substrate, where the first pad is connected to the first terminal and the second pad is connected to the second terminal. According to this exemplary embodiment, the overmolded module further comprises a solder mask trench situated underneath the surface mount component, where  
10 the solder mask trench is filled with molding compound. The overmolded module further comprises a moldable gap situated between a bottom surface of the surface mount component and a top surface of the substrate, where the moldable gap includes the solder mask trench.